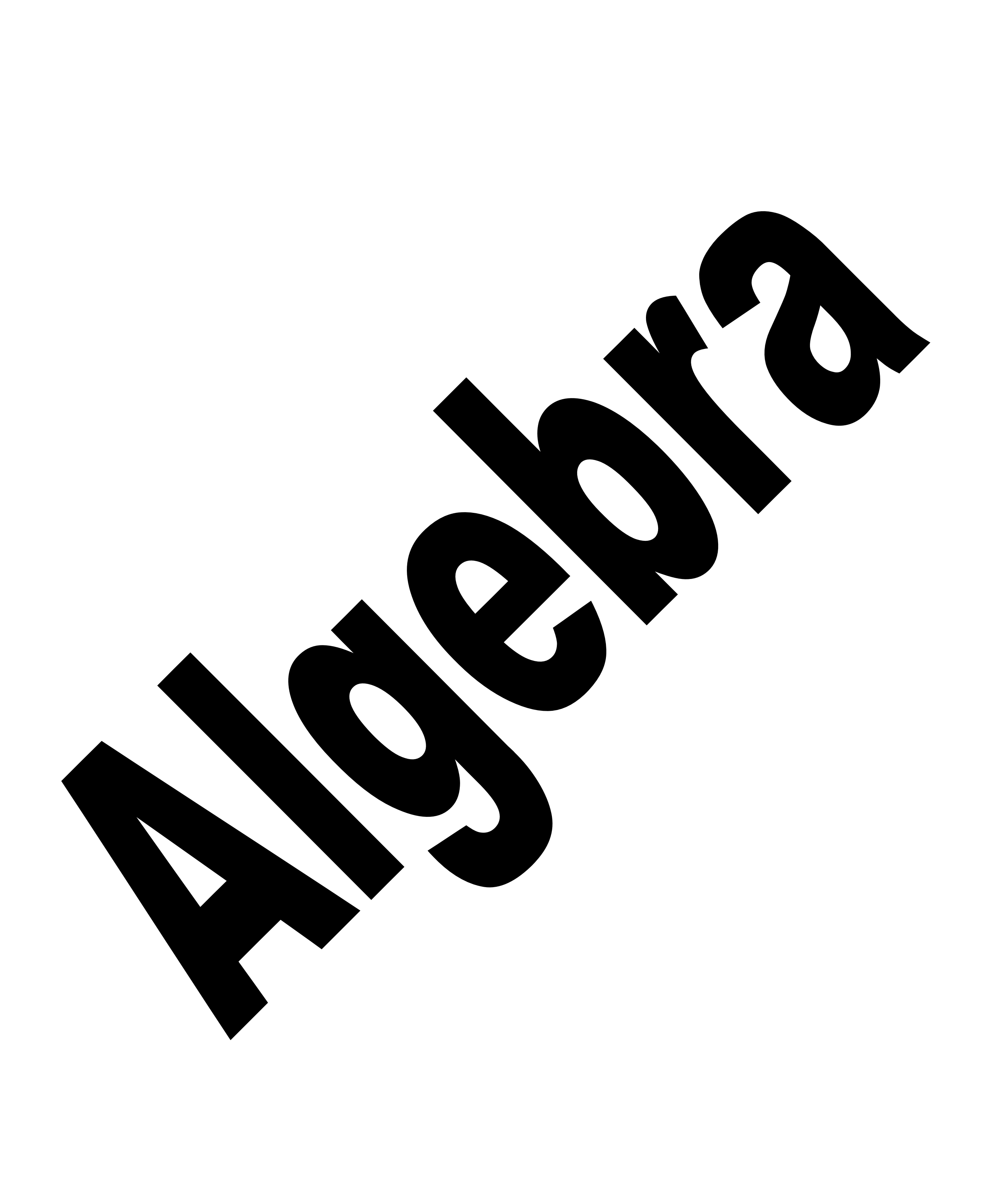

Algebra

Cairo Governorate
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Department : Math
Form : 1st prep.
Sheet

Alg.

Exercise (1)

[1] Complete :

1) Rational number is ……………………………………

2) The set of integer is …………………………………..

3) If $\frac{a}{b}$ is rational then b ≠ ………………………………

4) The number $\frac{4}{x-3}$ is rational if x ≠ ………………………….

5) The number $\frac{x+5}{x-5}$ is rational if x ≠ ………………………….

6) The rational number $\frac{5-x}{x-4}$ = 0 if x = ………………………..

7) The rational number $\frac{a}{b}$ is an integer if ……………………….

8) Express of 0.57 as rational number is simplest form ………………….

9) The rational number $\frac{x}{-4}$ is negative if x …………..zero .

10) If $\frac{a}{b}$ is rational number and ab = zero then a = …………..

11) Write the rational number $\frac{7}{11}$ as decimals ………………

Exercise (2)

[1] Represent each of the following on number line :

a) $\frac{-7}{4}$ b) $1\frac{1}{5}$ c) $-\frac{1}{2}$

[2] Write the correct sign (< , > , =) :

a) Every positive rational number ……………..zero .

b) Every negative rational number …………….zero .

c) $\left|\frac{-13}{2}\right|$ ………….. $6\frac{1}{2}$

d) $\frac{-9}{3}$ ………..-3

e) $\left|\frac{15}{2}\right|$ ……….$7\frac{1}{2}$

f) 0.5 ………. $0.\dot{5}$

g) $\left|\frac{-3}{2}\right|$ ………… $\frac{1}{2}$

[3] Write two rational number lying between :

1) $\frac{1}{3}$ and $\frac{4}{5}$ 2) $\frac{-1}{2}$ and 1 3) 0.3 and $\frac{4}{5}$

[4] Complete :

1) Between each two successive integers there is ………………..

2) The opposite rational number $\frac{1}{3}$ on number line …………..

3) The number of integers lying between $\frac{5}{7}$ and $\frac{8}{11}$ are …………….

[5] Write the rational number that equal $\frac{3}{4}$ and the sum of terms 28 .

Exercise (3)

[1] Complete :

1) The additive identity element in φ is …………………

2) The additive inverse of number $\frac{3}{5}$ is …………..

3) The additive inverse of $(\frac{2}{3})^{zero}$ is ……………

4) The additive inverse of $\left|\frac{-4}{5}\right|$ is ………………

5) The additive inverse of number zero ……………

6) The additive inverse of – 0.5 is ……………..

7) The remainder of subtracting $\frac{1}{5}$ from $\frac{6}{5}$ = ……………..

8) The remainder of subtracting $\frac{1}{3}$ from $\frac{-4}{3}$ ……………

9) The remainder of subtracting $\frac{-3}{2}$ from zero ……………

10) A + $\frac{7}{8}$ = zero then A = …………..

11) If (A + $\frac{1}{4}$) is additive inverse of number $\frac{3}{4}$ then A = ……………..

12) If X = 2 , Y = 3 and Z = 4 then $\frac{X}{Y} - \frac{Z}{X}$ = ……………

[2] Using the number line to find result :

a) $-\frac{1}{3} + \frac{7}{3} =$

b) $\frac{5}{7} + \frac{1}{7} =$

[3] Using the addition properties in :

a) $\frac{5}{8} + (\frac{-3}{4}) + \frac{3}{8} + \frac{3}{4}$

b) $7\frac{1}{4} + (-11\frac{1}{4})$

c) $\frac{2}{3} + \frac{4}{5} + \frac{3}{4}$

[4] If X = $\frac{5}{6}$, Y = $\frac{-1}{3}$, Z = $\frac{1}{2}$ find :

a) X + Z

b) X – Y

c) (X + Z)

d) (X + Y) – Z

Exercise (4)

[1] Complete :

1) The multiplicative identity of the rational no. is …………..

2) The multiplicative inverse of no. $\frac{3}{7}$ is …………….

3) The multiplicative inverse $(\frac{-3}{5})^{zero}$ is ……………

4) The rational no. $\frac{a-1}{5}$ has multiplicative inverse if a = ……………..

5) The rational no. has multiplicative inverse is ………………

6) $\frac{2}{3} \times (\frac{-4}{5}) = \frac{-4}{5} \times$ ………………

7) If $\frac{a}{b} = 80$ then $\frac{a}{2b} =$ …………….

8) $\frac{X}{Y} = \frac{2}{3}$ then $\frac{3X}{2Y} =$ …………….

9) $\frac{2}{3} \times \frac{3}{4} \times \frac{4}{5} \times$ ………….$\times \frac{50}{51} =$ ……………

10) $\frac{-7}{3} \times (\frac{-3}{7}) = n$, then n = …………

11) $\frac{-5}{3} \times$ ……….. = 0

12) ………..$\times \frac{19}{3} = 1$

[2] Using properties of following :

1) $\frac{6}{37} \times 7 + \frac{6}{37} \times 5 + \frac{6}{37} \times (-11)$

2) $\frac{-3}{7} \times 8 + 5 \times (\frac{-3}{7}) + (\frac{-3}{7}) \times 9$

3) $\frac{27}{11} \times \frac{1}{4}$ - $\frac{27}{11} \times \frac{1}{4}$ + $\frac{27}{11} \times 9$

[3] If X = $\frac{3}{2}$, Y = $\frac{-1}{4}$ and Z = -2

a) $\frac{1}{XYZ}$

b) $\frac{X}{Y}$ - $\frac{Z}{Y}$

[4] Find the middle rational no. lying between :

a) $\frac{3}{8}$, $\frac{5}{8}$

b) $\frac{-1}{2}$, $\frac{-3}{4}$

c) zero , $\frac{2}{5}$

[5] Find the rational number lying at :

a) One fourth of way between $\frac{5}{7}$, $\frac{-3}{7}$

b) One tenth of way between $\frac{-1}{2}$, $\frac{-3}{5}$

Unit Two

[1] Complete :

1) The degree of term 3 X^2 Y is ……………its coefficient is ………………

2) The coefficient of algebraic term $\frac{2}{3}$ X^4 Y Z^3 is ……………and its degree ……………..

3) The degree of an absolute term in algebraic expression …………………..

4) $-3a^5b$ number of terms …………..name is …………… , degree is ……………..

5) 5 X^3 – 7 X + 4 number of terms …………….name ……………, degree is …………….

6) The coefficient of the algebraic term X is …………..and its degree is ……………

7) If the degree of the algebraic term 5 X^n Y^2 is 5 then n = …………….

8) If the degree of algebraic term Y^{m+1} is the degree of a algebric term 5 X^2Y^4 then in = …………………..

Sheet (7)

[1] Find the result of each of following :

1) 3X + 2X

2) $-5a^2 + 3a^2$

3) $\frac{3X}{7} - \frac{X}{7}$

4) $-2 X^2 Y + 3Y X^2$

5) Subtract Y^2 from – 3 Y^2

6) What is increase of $3a^2$ b than a^2 b is ?

7) What is decrease of – 3ab than 2ab ?

8) Find the sum of :

a) 3a – 4b + 6c
5a + 6b – 2c

b) 3a – 7b – 5c + 2
-a + 4b + c – 5

c) 5x + 2y – z + 2
7x + y – 32 + 3
-2x – 5y + 4z – 1

[2] Find the sum of following :

1) $3X - 2Y$, $X + 2Y - 2$

2) $2a^2 b - 3ab^2 + b^3$, $- a^2 b + b^3$

3) $3X - 4X^2 + X^3$, $2X^2 - 6X^2 - 6X + 5$, $7X + 4 - X^3$

[3] Reduce each of the following :

1) $5X - 3X^2 + 4 - 7X^2 - 6X - 1$

2) $6X^2Y - 4XY^2 + 2XY^2 - 5X^2Y + 2X^2Y^2$

3) $5X^2 - 2X + 8 - 7X - 3 + X^2$

4) $-a^2 - 5ab + 4b^2 - 2 - 3a^2 + 2ab - 2b^2 - 7$

Sheet (8)

[1] Simplify :

1) $4(X - 3) =$ ……………………………..

2) $a(a - 2) =$ ……………………………

3) $-3k(2k^2 - 3k - 7) =$ …………………………

4) $-2c(7 - 3c) =$ ………………………….

5) $2X^2Y(2X^2 - 3XY + Y^2) =$ …………………

6) $Lm^2(L^2 - 3mL - 4m^2) =$ …………….

7) $(3X + 4)(2X + 5) =$ ………………..

8) $(5X + 1)(3X + 2) =$ …………………

9) $(2X + 5Y (2X - 5Y) =$ …………………….

10) $(X - 4)(X + 4) =$ ……………………

11) $(2X + Y)^2 =$ ……………………..

12) $(4X + 5Y)^2 =$ ………………….

13) $3(m - 5)(m + 2) =$ …………………….

14) $4(XY - 2)^2 =$ …………………..

15) $(2X^2 + 3)(X^2 - 5) - (3X^2 + 2)^2 =$ …………………..

[2] Find value of K :

1) $(2X + Y)^2 = 4X^2 + KXY + Y^2$ then K = ……………..

2) If $(X - Y)(2X + Y) = 2X^2 + KXY - Y^2$ then K ……………..

3) $(X - 3)(X + 3) = X^2 + K$ then K = …………..

[3] Find numerical value of following :

If $X = 1$, $Y = -2$

1) $(2Y + 7)(3Y + 4)$

2) $(X + 4)(3X + 2)$

3) $(3X + Y)(X + 3Y)$

Sheet (8)

[1] Find the quotient :

a) $\dfrac{18a^2}{3a}$

b) $\dfrac{18m^3 + 36m^2}{-2m^2}$

c) $\dfrac{48X^3 - 80mX^2}{8X^2}$

d) $\dfrac{32X^5 - 32X^2 + 36X^7}{4X^2}$

e) $2X^2 + 13X + 15$ by $X + 5$

f) $X^3 - 27$ by $X - 3$

g) $3X^3 - 4X + 1$ by $X - 1$

h) If area of rectangle is $(2X^2 + 7X - 15)$ and length is $(X + 5)$ find perimeter if $X = 3$ cm.

Sheet (9)

Factorize by identifying the H.C.F :

a) $3 X^2 + 6 X$

b) $35 a + 10 a^2$

c) $3 X^2 + 12 X - 6$

d) $8 Y^2 - 4 X^2$

e) $3X (a + b) + 7 (a + b)$

f) $3 X^3 (X - 4) + 4 X (X - 4) + 3 (X - 4)$

g) $4 m^5 (2X + 5 Y) - 3 m (2 X + 5 Y) - 6 (2 X + 5 Y)$

h) $7 \times 123 + 7 \times 35 - 7 \times 18$

i) $6 \times 15^2 + 18 \times 15 - 24 \times 15$

Sheet (10)

1) The mode of set of values is ………………………..

2) The mode of values of 2 , 3 , 8 , 2 , 9 is …………………….

3) The mode of values 3 , 6 , 13 , 19 , 19 , 12 is ………………..

4) If the mode of values $\frac{1}{3}$, $\frac{1}{7}$, $\frac{1}{5}$, $\frac{1}{7}$ is $\frac{1}{X}$ then X = ………………..

5) If the mode of values 12 , 17 , X – 1 , 7 , 12 is 7 then X = …………….

6) If mode of values of a + 2 , a + 1 , a + 3 , a + 2 equal 12 then a = …………….

7) The median of values 4 , 8 , 3 is …………….

8) The median of values 6 , 5 , 9 , 8 is ……………….

9) The median of values 8 , 17 , 4 , 6 , 10 is ………………….

10) The median of values 6 , 2 , 5 , 4 is ……………………….

11) The mean of values 5 , 12 , 6 , 17 is ………………

12) The mean of values 2 , 5 , 8 , 9 , 14 , 28 is ……………………..

13) The mean of values 2 – a , 4 , 1 , 5 ,3 + a is …………………

14) The mean of values X , X – Y , Y – X is ……………..

[2] The following table shows the number of hours that . Ali and Ahmed study daily in a week .

Ali	7	5	8	9	8	6	4
Ahmed	8	9	7	9	9	5	5

a) find mean of studying hour for each Ali , Ahmed

b) Find median of each of them .

c) Find mode of hours of each of them .



Model exam (Alg.)

[1] Complete :

a) $\frac{3-x}{x+2}$ = zero if χ = …………………

b) The degree of the algebraic term $6\ x^2\ y^3$ is……………………..

c) The additive inverse of the number $\left|\frac{-3}{5}\right|$ is ……………………..

d) -8 X exceeds 5 X by …………………

e) ($12\ x^3 \div 4\ x$) × ……………….= $6\ x^4$.

---

[2] Choose the correct answer :

1) $\frac{-2}{5} \times n = 1$ Then n = ……………………..

a) $\frac{5}{2}$ b) $\frac{-5}{2}$ c) $\frac{2}{5}$ d) $\frac{-2}{5}$

2) The rational number ……………….. lies in half way between $\frac{1}{2}$ and $\frac{7}{8}$

a) $\frac{11}{16}$ b) $\frac{5}{8}$ c) $\frac{3}{4}$ d) $\frac{1}{2}$

3) $\frac{3}{x+2}$ is a rational number then x ≠ …………………..

a) zero b) -3 c) 2 d) -2

4) Express $\frac{4}{11}$ as a decimal ……………………………..

a) 0.36 b) 0.363 c) 0.36 d) 0.036

5) If $\frac{x}{y} = \frac{2}{5}$ Then : 5 x – 2 y = …………………………

a) $\frac{2}{5}$ b) $\frac{5}{2}$ c) 1 d) zero

---

[3] a) **Add :** 3 x – 5 y – 6 and 3 y + 2 x + 5

b) Use distributive property to find : $\frac{5}{9} \times 11 + \frac{5}{9} \times 8 - \frac{5}{9}$

c) The length of a rectangle is 5 x cm and its width is 3x cm . calculate its area .

---

[4] a) Subtract : $6\ x^2 + 2\ x - 5$ from $2\ x^2 - 3\ x + 4$

b) If $a = \frac{3}{4}$, $b = -\frac{1}{2}$ find the value of (a + b) ÷ (a – b)

c) Find three rational numbers between $\frac{1}{2}$, $\frac{1}{3}$


Geometry

Geom.

Sheet (1)

[1] Mention the type of angle whose measure is as following :

1) 57°　　2) 117°　　3) 90°

4) 180°　　3) $43\frac{1}{2}$　　6) 89° 59´ 60´´　　7) 179° 62´

[2] Complete :

1) The angle is ……………………..
2) The measure of straight angle …………………
3) The measure of zero angle ……………………
4) The measure of right angle ……………………
5) The measure of acute angle is less than ……………and more than ………………..
6) The measure of obtuse angle is less than more than ……………..
7) The two complement angles are two angles whose sum of their measure is ……………..
8) The two supplement angles are the two angles whose sum of their measure is …………..
9) The two adjacent angles formed by straight line and ray with same stating point are ……………….
10) If the two outer sides of two adjacent angles are perpendicular , then these two adjacent angles are ……………….
11) If the two outer sides of two adjacent angles are on the same straight line , then these adjacent angles are ……………………
12) The measure of angle which complement with 48° is …………………
13) The measure of angle which complement with 90° is ……………….
14) The measure of angle which complement with $60°\frac{1}{4}$ is ………………
15) Measure of angle which supplementary with 90° is …………….angle .
16) Measure of angle which supplementary with 180° is …………..angle .

17) Measure of angle which supplementary with 48° .

18) If two straight lines intersect then the measure of each two vertically opposite angle are …………………

19) The sum of measure of accumulative angles at point ………………

20) Angle bisector is ……………….

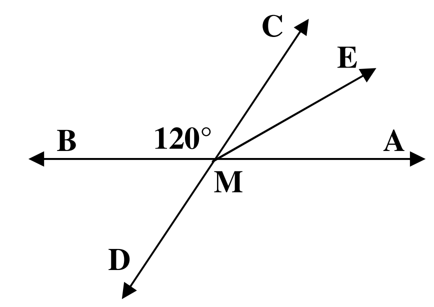
21) If m (A) = 80 then (reflex ∠A) = ……………°

22) In opposite figure :

a) M is the point intersection of $\overleftrightarrow{AB}$ and $\overleftrightarrow{CD}$, $\overrightarrow{ME}$ bisects ∠ AMC and

m (∠BMC) = 120° . Find :

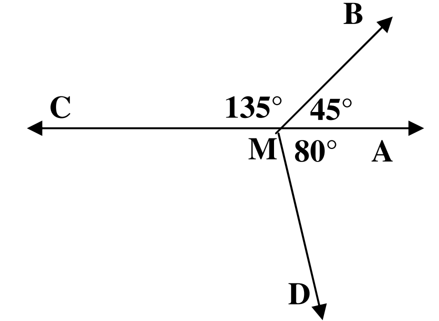
m (∠AMC) , m (∠AMD) , m (∠AME)



<u>b) In the figure :</u>

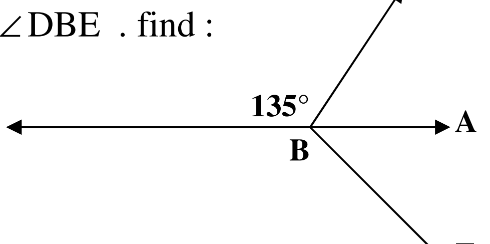
1) m (∠CMD) = ………°

2) …………and …………lie on the same straight line .



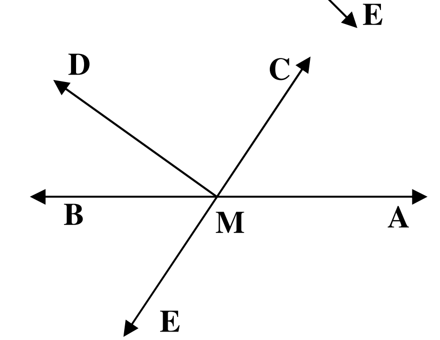
c) If B ∈ $\overleftrightarrow{AC}$, m (DBC) = 135° and $\overrightarrow{BA}$ bisects ∠DBE . find :

m (ABD) , m (DBE) , m (CBE)



d) If $\overleftrightarrow{AB} \cap \overleftrightarrow{CE}$ = {M} , $\overrightarrow{MD} \perp \overrightarrow{CE}$ and $\overrightarrow{MB}$ bisects ∠DME . Find :

m (∠BME) , m (DME) , m (∠AMC) , m (AME)



Sheet (2)

[1] Complete :

1) The two line segment are congruent if …………..

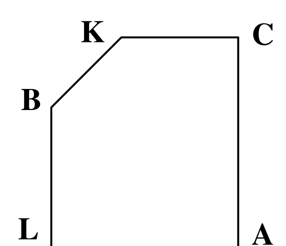
2) The two angles are congruent if …………….

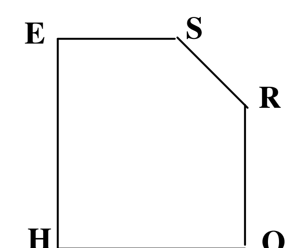
3) The two square are congruent if …………….

4) The two rectangle are congruent if …………

[2] In the opposite figure :

The two pentagons shown are congruent





Complete :

1) B correspond to ………………..
2) The polygon BLACK is congruent the polygon ……………..
3) KB = …………… cm.
4) M (∠E) = m (∠…………)
5) CA = …………cm
6) M (∠A) = m (……)

[3] In the opposite figure :

If C ∈ BD , m (AFC) = 110° , BC = 5 cm and polygon ABCF ≡ the polygon EDCF

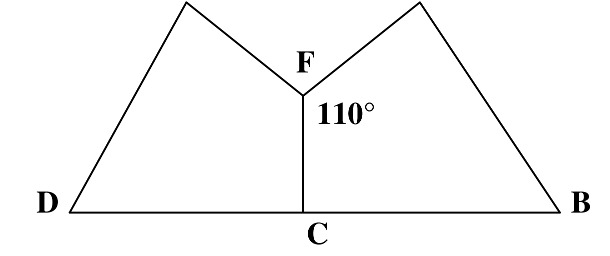
ED = 8 cm , EF = 4 cm .

Complete :

M (EFC) = ………..

DC = ………..cm

AB = ……….. AF = …………



Sheet (3)

1) Draw the line segment whose length 7 cm. then divid it into two equal parts in length using the compass and the an scaled ruler .

2) Draw $\angle ABC$ where $m(\angle B) = 80°$ using the ruler and compasses bisect $\angle B$ by $\overrightarrow{BD}$

3) Use the ruler and compasses to draw the equilateral ΔABC of side 6 cm . Draw $\overline{AD} \perp \overrightarrow{BC}$ where $\overrightarrow{AD} \cap \overline{BC} = \{D\}$. what the length of $\overline{AD}$.

4) Draw $\angle XYZ$ whose measure 70° use ruler and draw congruent equal to it .

5) Using the protractor , draw $\angle ABC$ with measure 70° and on the other side of BA , draw using ruler and compasses draw $\overrightarrow{AE} // \overrightarrow{BC}$.

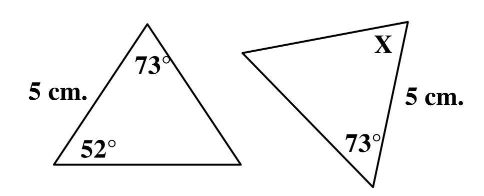
Sheet (4)

[1] Complete the following :

1) Any two triangle s are congruent if two sides ………………
2) Any two triangles are congruent if two angles and ……………in one of the triangles are congruent to their corresponding element in the other .
3) Any two triangles are congruent if each …………is congruent to its corresponding side in the other triangle .
4) Any two right – angled triangles are congruent if ……………..
5) The diagonal of the rectangle divides its surface into two …………..triangles .
6) If Δ ABC $\equiv$ Δ XYZ , then AB = …………and m ($\angle$Z) = m ($\angle$……….)

[2] In the opposite figure :

These triangles are congruent , then X = ………..°



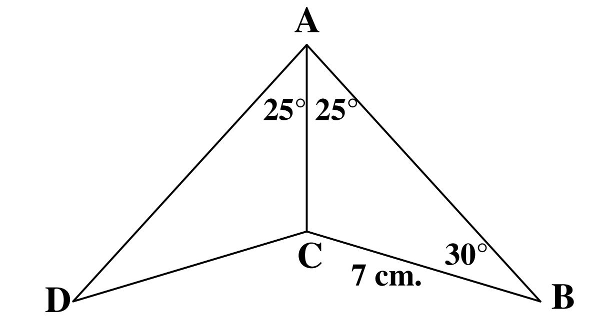
[3] In the opposite figure :

If AB = AD , BC = 7 cm. , m ($\angle$BAC) = m ($\angle$DAC) = 25° and m ($\angle$B) = 30°

Complete the following :

If Δ ACB $\equiv$ Δ ACD

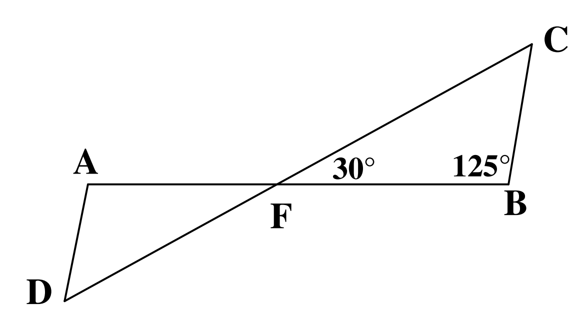
1) m ($\angle$D) = …………°
2) CD = ……….cm.
3) m ($\angle$ACD) = ……….°



[4] In the opposite = {F} , FA = FB , CF = FD ,

m ($\angle$CFB) = 30° and m ($\angle$B) = 125° ,

Then m ($\angle$D) = ………..°

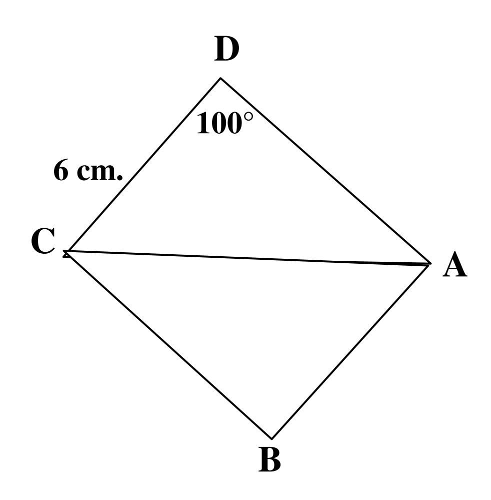


[5] In the opposite figure :

If $\overleftrightarrow{AC}$ bisects $\angle DCB$, $\angle DAB$, m ($\angle D$) = 100°

And DC = 6 cm. complete the following :

1) Δ ADC ≡ Δ …………….
2) m ($\angle B$) = ……………
3) BC = …………cm .

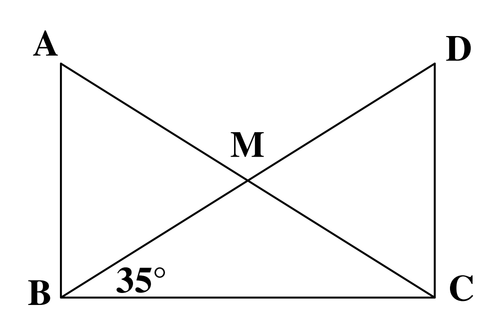


[6] In the opposite figure :

AB = CD , m ($\angle DBC$) = 35° ,

$\overline{AB} \perp \overline{BC}$ and $\overline{DC} \perp \overline{BC}$,

Then m ($\angle BMC$) = ……………



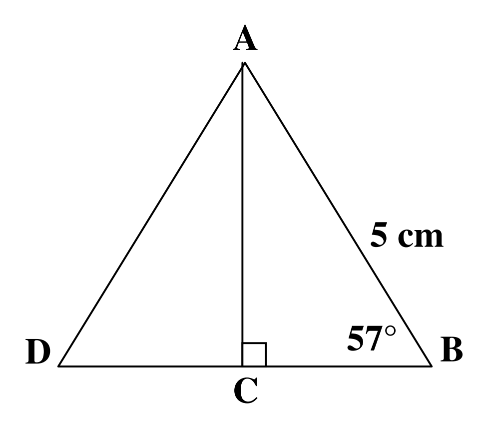
[7] In the opposite figure :

C is the midpoint of $\overline{BD}$, $\overline{AC} \perp \overline{BD}$,

AB = 5 cm. , and m ($\angle B$) = 57°

Find :

1) The length of $\overline{AD}$
2) m ($\angle DAC$)

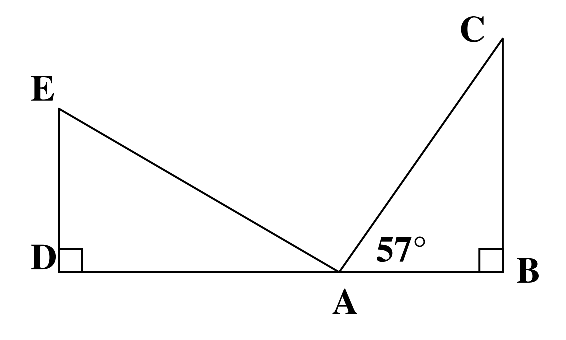


[8] In the opposite figure :

BC = AD , AC = AE

And m ($\angle CAB$) = 57°

Find the measures of the unknown angles in Δ ADE



Sheet (5)

[1] Complete the following :

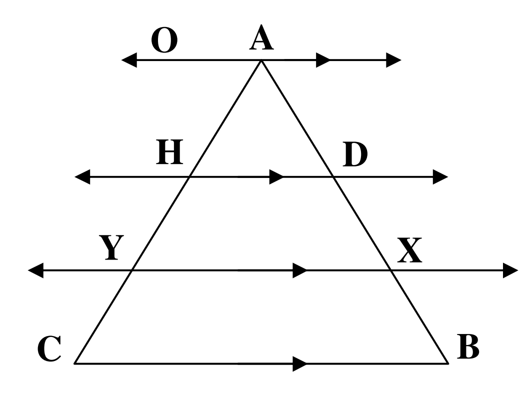
1) If two straight lines are parallel to a third straight line , then they are ……………
2) If a straight line cuts two parallel straight lines , then each two corresponding angles are …………….
3) If a straight line cuts two parallel straight lines , then each two interior angles in the same side of the transversal are ………………

[2] In the opposite figure :

$\overline{AO} \parallel \overleftrightarrow{HD} \parallel \overleftrightarrow{YX} \parallel \overline{CB}$

, AD = DX = XB and AC = 18 cm.

Find the length of AY



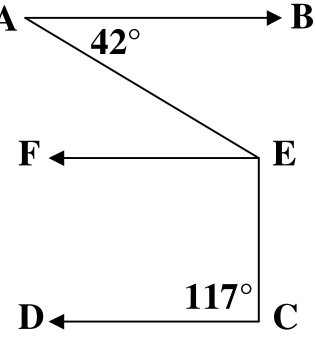
[3] In the opposite figure :

$\overrightarrow{AB} \parallel \overrightarrow{CD}$, $\overrightarrow{EF} \parallel \overrightarrow{CD}$

, m (∠A) = 42° and m (∠C) = 117°

Determine :

m (∠AEC)



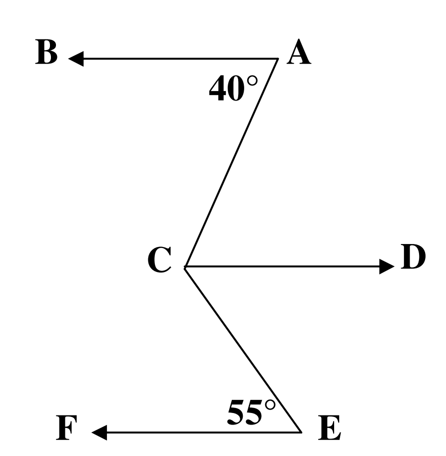
[4] In the opposite figure :

m (∠A) = 40° , m (∠E) = 55°

$\overrightarrow{AB} \parallel \overrightarrow{EF}$ and $\overrightarrow{AB} \parallel \overrightarrow{CD}$

Find :

M (∠ACE)

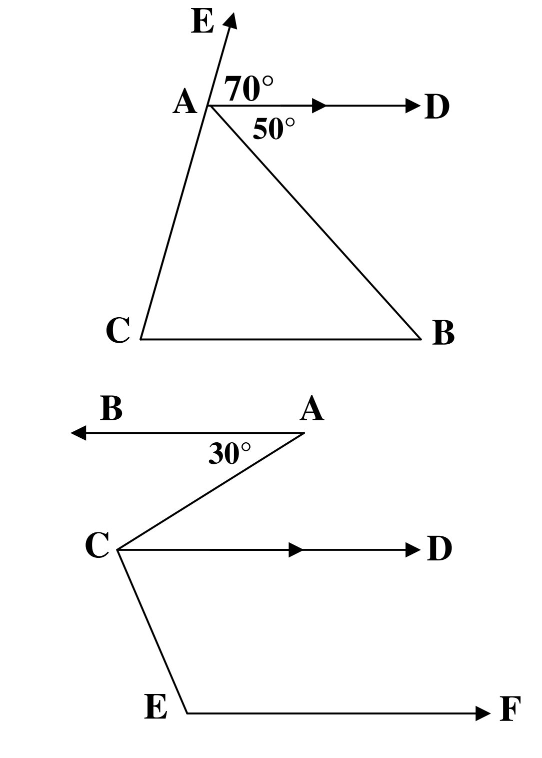


[5] In the opposite figure :

$\overrightarrow{AD} // \overline{BC}$, $E \in \overrightarrow{CA}$,

m ($\angle$DAE) 70° and m ($\angle$DAB) = 50°

Find the measures of the triangle ABC



[6] In the opposite figure :

$\overrightarrow{AB} // \overrightarrow{CD} // \overrightarrow{EF}$, m ($\angle$A) = 35° and

$\overrightarrow{CD}$ bisects $\angle$ACE

Find :

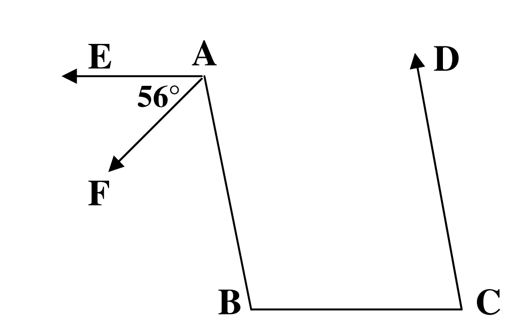
1) m ($\angle$DCE)
2) m ($\angle$CEF)

[7] In the opposite figure :

$\overline{AE} // \overline{CB}$, $\overline{BA} // \overline{CD}$,

$\overrightarrow{AF}$ bisects $\angle$BAE and m ($\angle$EAF) = 56°

Find : m ($\angle$C)



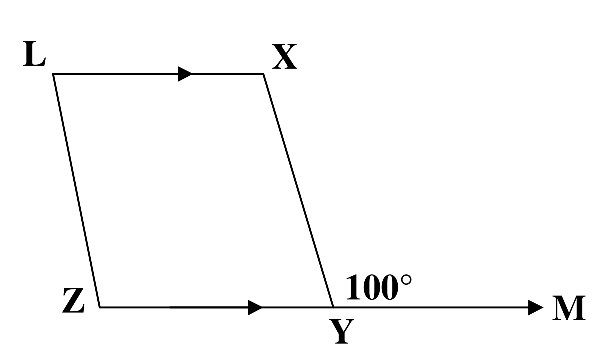
[8] In the opposite figure :

$\overline{XL} // \overline{YZ}$, $\overline{XY} // \overline{LZ}$ and m ($\angle$XYM) = 100°

Where $M \in \overrightarrow{ZY}$

Find :

1) m ($\angle$X)
2) m ($\angle$Z)
3) m ($\angle$L)



Model exam

2- Choose the correct answer :

1) The angle whose measure 50° complements the angle whose measure ………..°

a) 40°   b) 130°   c) 50°   d) 180°

2) The measure of the vertically opposite angle of an angle of measure 70° is ………°

a) 20°   b) 70°   c) 110°   d) 290°

3) A B C is an aright angled triangle at B , A B = 3 cm , B C = 4 cm then $(A C)^2$ = … cm^2

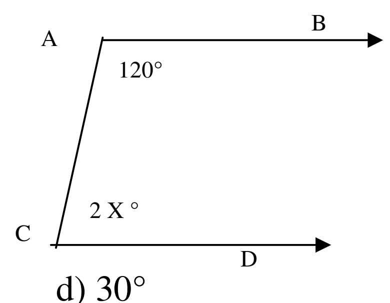
a) 2.5   b) 16   c) 5   d) 25

4) If L_1 // L_2 and $L_1 \perp L_3$ then ………………

a) L_1 // L_3 b) $L_2 \perp L_3$ c) $L_1 \perp L_2$ d) L_1 intersects L_2

5) $\overline{AB}$ …………….. $\overrightarrow{AB}$

a) ∈   b) ∉   c) ⊂   d) ⊄



6) **In the opposite figure :**

$\overrightarrow{AB}$ // $\overrightarrow{CD}$ then x = ……………

a) 120°   b) 100°   c) 60°   d) 30°

2- Complete :

a) The angle whose measure is 70° supplementary the angle whose measure is …………°

b) If m (∠ A B C) = 120° then m (reflex ∠ A B C) = ………..°

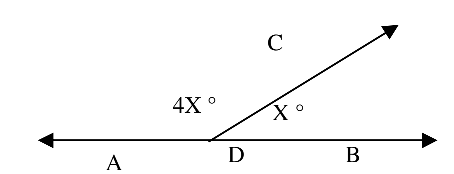
c) If Δ A B C ≡ Δ X Y Z then A C = …………..

d) If a st. line intersects one of two parallel st. lines then ……………..

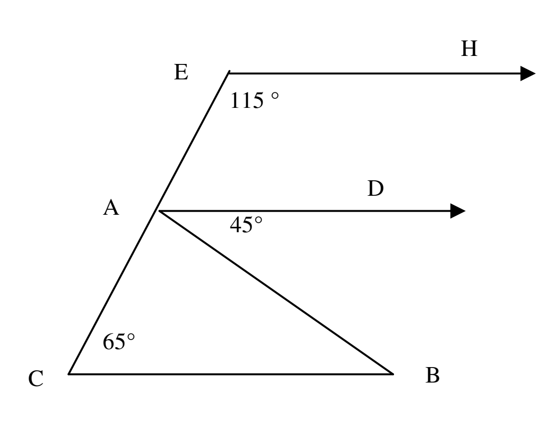
e) The sum of measure of the accumulative angles at a point equals …………°

f) In the opposite figure :

D ∈ $\overleftrightarrow{AB}$ then X = …………..°



3- a) In the opposite figure :



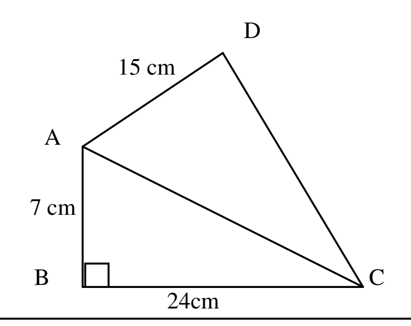
A $\in \overline{CE}$, $\overrightarrow{EH} \parallel \overrightarrow{AD}$, m ($\angle$ E) = 115° ,

m ($\angle$ B A D) = 45° , m ($\angle$ C) = 65°

(i) is $\overrightarrow{EH} \parallel \overline{CB}$? Why ?

(ii) Find : m ($\angle$ C A B)

b) In the opposite figure:



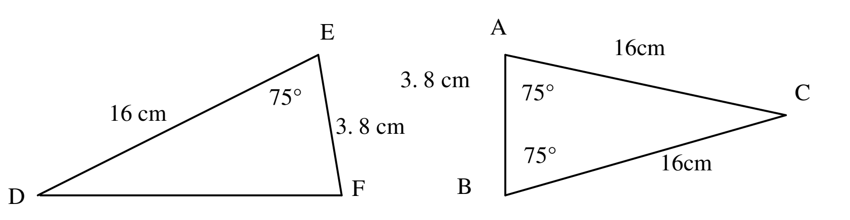
m ($\angle$ B) = 90° , m ($\angle$ D) = 90°

AB = 7 cm , B C = 24 cm , AD = 15 cm

Find $(\overline{CD})^2$

4- a) Using the geometric instruments draw Δ A B C in which A B = A C = 5 cm and B C = 6 cm draw $\overrightarrow{AD} \perp \overline{BC}$ to cut B C at D. Find the length of $\overline{AD}$ and the area of Δ A B C

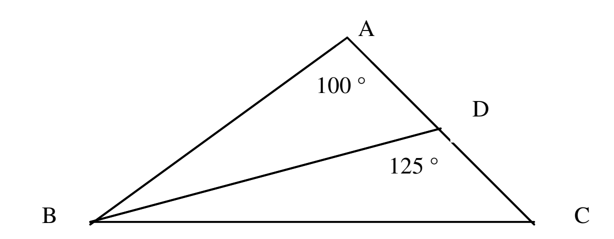
b) In the opposite figure :



Prove that : Δ A B C $\equiv$ Δ E F D

and find : m ($\angle$ D) and D F

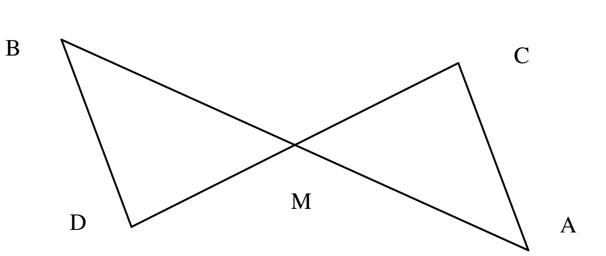
5- a) In the opposite figure :



m ($\angle$ A) = 100 , $\overline{BD}$ bisects ($\angle$ C B A) ,

m ($\angle$ B D C) = 125° find : m ($\angle$ C)

b) In the opposite figure :



$\overline{AB} \cap \overline{CD}$ = { M } , A M = B M and

C M = D M

is Δ A M C $\equiv$ Δ B M D ? Why ?